

WHAT IS CLAIMED IS:

1. A fuel cell comprising:  
a fuel cell stack formed by stacking plural cells of varying types,  
5 each of the types having a different characteristic.
2. The fuel cell according to claim 1, wherein the fuel cell stack is  
composed of varying types of cell blocks, each of the blocks being formed by  
stacking plural cells of the same type.  
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3. The fuel cell according to claim 1, wherein the fuel cell stack is  
formed using, as one of the cells of varying types, a small pressure loss type cell in  
which loss of pressure of gas flowing therethrough is small compared with a normal  
cell.  
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4. The fuel cell according to claim 3, wherein the fuel cell stack is  
formed by stacking the cells such that the small pressure loss type cell is disposed in a  
vicinity of an end portion of the fuel cell stack.
- 20 5. The fuel cell according to claim 3, wherein the fuel cell further  
comprises a supply port through which gas is supplied to the fuel cell stack, and  
which is provided in one end portion of the fuel cell stack, and the fuel cell stack is  
formed by stacking the cells such that the small pressure loss type cell is disposed in a  
vicinity of the other end portion of the fuel cell stack.  
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6. The fuel cell according to claim 5, wherein the fuel cell further  
comprises a discharge port through which gas is discharged from the fuel cell stack,  
and which is provided in the same end portion of the fuel cell stack as the supply port.
- 30 7. The fuel cell according to claim 3, wherein the fuel cell stack is  
formed by stacking the cells such that the small pressure loss type cell is disposed in a  
portion in which a shortage of gas supply is likely to occur.

8. The fuel cell according to claim 3, wherein the small pressure loss type cell is formed such that a cross section of a gas path through which gas actually passes is large as compared with the normal cell.

5 9. The fuel cell according to claim 3, wherein the small pressure loss type cell is formed such that a gas path through which gas actually passes is short as compared with the normal cell.

10 10. The fuel cell according to claim 1, wherein the fuel cell stack is formed using, as one of the cells of varying types, a water proof type cell whose performance is good when flooding occurs as compared with performance of a normal cell when flooding occurs.

15 11. The fuel cell according to claim 10, wherein the fuel cell stack is formed by stacking the cells such that the water proof type cell is disposed in a portion in which flooding is likely to occur.

20 12. The fuel cell according to claim 11, wherein each of the cells includes an electrolyte membrane formed from solid polymer material.

13. The fuel cell according to claim 10, wherein the water proof type cell includes a high drainage performance type cell having high drainage performance as compared with a normal cell.

25 14. A fuel cell comprising:  
plural first cells that are stacked; and  
at least one second cell which has a characteristic different from that  
of the first cell.

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